

HINTERLAND WHO'S WHO

THE BLACK BEAR

Canadian Wildlife Service

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Black bear. Credit Ontario Department of Lands and Forests

HINTERLAND WHO'S WHO

The black bear

(*Ursus americanus pallas*)

The black bear is one of the most familiar wild animals in North America today. To many campers it is both a nuisance and an exciting part of their outdoor experience. Most tourists to our provincial and national parks are disappointed if they fail to catch at least a glimpse of a bear during their visit.

Black bears are members of the family Ursidae, which has representatives throughout most of the Northern Hemisphere and in northern South America. Other members of this family that occur in North America are brown or Kodiak bears, grizzly bears, and polar bears. All of these species are considerably larger than the black bear.

Widely distributed in North America, the black bear occurs across the continent from the east to the west coast and is found as far north as Alaska and as far south as Mexico. It is not found in the extreme northern regions of Canada or in the arid deserts of southwestern United States.



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Although occasionally found in a variety of habitats, it prefers heavily wooded areas and dense bushland. Maximum numbers are probably attained in areas of mixed coniferous-deciduous forests. It is estimated that in primitive times 500,000 black bears ranged across the continent. Total numbers presently in North America are not accurately known, but there are probably less than half the primitive number.

Physical characteristics and adaptations

The black bear is a bulky, thickset, massive mammal approximately five feet long. Height at the shoulder of adults varies from three to four feet. It has a moderate-sized head with a rather straight facial profile and a tapered nose with long nostrils. Unlike other animals such as the wolf or bobcat, the lips are free from the gums and thus can be manipulated with amazing dexterity. This adaptation greatly assists the bear when feeding, especially if the food is berries or insects. The ears are rounded and the eyes small. The tail is very short and inconspicuous. Its feet are well furred and plantigrade. This means it walks like a man with the entire bottom portion of the foot touching the ground. Each foot has five recurved claws which are not retractable. These are very strong and are used for digging and tearing out roots, stumps, and old logs when searching for food.

Owing to their compactness, bears often appear much heavier than they really are. Adult males weigh about 300–400 pounds, although exceptionally large animals weighing over 600 pounds have been recorded. Females are somewhat smaller than the males.

The normal colour is black with a brownish muzzle and frequently a white patch below the throat or, across the chest. Although black is the most common colour, various colour phases such as brown, dark brown, cinnamon, blue-black, and even white also occur. Albinos are infrequent. These lighter colour phases are more common in the western parts of the range and in the mountains than in the eastern sections. The white phase is most common along the coast of the Pacific northwest, but even there it occurs only infrequently. Any of these colour phases may occur in one litter, but generally



Range of black bear

all cubs in a litter are the same colour.

The eyesight of the black bear is relatively poor, but its senses of hearing and smell are well developed. A startled animal will usually attempt to get downwind from an intruder and make an identification by means of its nose. Under favourable atmospheric conditions carrion, which it scavenges, can be detected at considerable distances, probably up to one mile. Frequently the black bear will stand on its hind legs with its nose in the air and scent the wind for any delectable odours.

Black bears appear awkward as they shuffle along, but can move with amazing speed if necessary. For short distances they have been clocked at speeds up to 35 miles per hour. They are good swimmers and have frequently been observed crossing rivers and small lakes.

Climbing is second nature to a black bear. Young animals readily take to trees when frightened. They climb with a series of quick bounds, grasping the tree with their forepaws and pushing with their hind legs. When descending they travel backwards, frequently dropping from the tree from heights up to 10 to 15 feet. Once on the ground, they quickly disappear into the underbrush, apparently unshaken by the rather abrupt descent.

Although they are rarely heard, the black bear has several distinct calls. These include

berries, black cherries, and apples. Acorns, hazelnuts, and beechnuts are other preferred foods. Insects such as ants and grasshoppers rate high on the black bear's list of palatables. Anyone who has travelled in black bear country is familiar with logs, old stumps, and stones that have been overturned by a foraging bear.

Fish, small mammals, and occasionally birds also occur on the black bear's menu. Carrion of any sort is highly prized and its attractiveness to a bear increases with its degree of decomposition. Of course a tree containing honey is always a treat. Bears drink frequently and are usually found in the vicinity of water.

Parasites and diseases

Fleas and ticks are external parasites that frequently occur on bears. Common internal parasites are broad tapeworms, hydatid worms, hookworms, and lungworms. Trichinosis, which is caused by a nematode or roundworm, is probably the most important parasite of bears, at least from a public health viewpoint. In settled areas bears may become infected by feeding on raw pork containing encysted larvae. Once ingested these larvae enter the blood stream of the bear and settle in various parts of the body where they develop and mature. They often occur in the diaphragm, or in the muscles along the ribs or chest. Since man can become infected, all bear meat should be cooked carefully before consumption. Freezing will also destroy the larvae. Other wild animals such as coyotes, wolves, and foxes can also become infected, so all uncooked garbage should be either burned immediately or buried deeply. The effects of these parasites on the physical well-being of bears is poorly known. Parasite infestation of most bears that have been examined was usually considered to be too light to affect seriously the health of the bear.

In addition to these parasites, bears sometimes suffer from abscesses that may have developed as a result of old gunshot wounds, wounds from fighting, or infected insect bites. They are usually located in the vicinity of the neck and flanks.

Older bears often suffer from dental disorders such as extreme tooth wear or, less often, complete loss of a tooth. In some instances, teeth, usually the molars, may be

so worn that only the root remains. This condition is frequently accompanied by some signs of inflammation and may be painful to the bear. Undoubtedly, bears with severely worn or diseased teeth would be hampered when feeding.

Joints of the long bones and portions of the skull may also become diseased. These abnormalities may take the form of excessive growth or of erosion of parts of the bone. Old injuries such as gunshot wounds probably cause many of these bone disfigurements. Although these injuries may not be severe enough to cause immediate mortality, they may contribute to a bear's death indirectly since loss of agility or stamina would lessen its chances of survival. It is probable that injuries are partly responsible for limiting black bear populations.

Relationship to man

The attitude of man towards bears has always been one of caution, respect, and, in primitive times, even reverence. Even today, many Indian tribes have special veneration for the bear, and any hunter who kills a bear commands considerable respect in his camp. In the early days of settlement, a bear hunter enjoyed considerable prestige because of the presumed danger of his work. The possession of a bear skin was indicative of a hunter's prowess and bravery. Even in our society a bear skin displayed in a modern home serves as a source of considerable comment.

Black bears are extremely fond of garbage and frequently congregate in areas where refuse is permitted to accumulate. This habit occasionally leads them into close contact with people who enjoy observing the feeding antics of the bears, especially the younger ones. Of course, if the bears demolish some picnicker's lunch, this feeding behaviour is not thought so amusing.

Most bears are extremely shy and retiring and usually avoid direct contact with humans. Incidents of black bears attacking humans have been reported, but these are extremely rare. These attacks were usually made by wounded animals or animals in extremely poor physical condition due to old age or disease.

When watching bears in parks or in the woods it should be remembered that these

are wild animals and they should be treated of with caution. They should not be fed. Most ar bears will hastily retreat if a person ar approaches too closely, but one should not cc take any unnecessary chances, as bears, like th people, are sometimes unpredictable. They ra make interesting subjects to observe and p photograph but they can be dangerous at ra close quarters.

th

Management

P Management should be directed towards the T maintenance of populations in remote areas m for hunting and the limiting of numbers at in more settled areas where problems of tc predation may arise. Once considered an w undesirable predator and a nuisance, black ta bears are rapidly gaining popularity as a ar prized game animal throughout most sec- ar tions of North America. A spring bear hunt m is especially appealing to the many sports- ac men who prefer larger game, since it provides fe them with the opportunity to hunt big game in during the spring when other animals are sr protected. Inhabiting heavily timbered coun- gr try, largely nocturnal, shy and elusive, they tax the skill of any hunter who attempts to th collect his own bearskin rug. In addition, in bear meat if properly prepared is considered cl highly palatable by many fanciers of wild vi game.

te Occasionally bears cause trouble when se they prey on livestock or upset beehives in an apiary. Usually incidents of this type are ap caused by one or two specific individuals A and the problem is solved by their removal.

al Undoubtedly the status of black bears as ir game animals will be enhanced in the future F as human populations expand and the de- rr mand for huntale game species increases.

Because of its value as a tourist attraction is and big game species, further investigations b into the ways of this wily northwoods wan- tr derer merit our attention.

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How does the Canadian Wildlife Service fit into the national wildlife picture?

The Canadian Wildlife Service carries out both wildlife research and management. As a branch of the Department of Indian Affairs and Northern Development, it is entrusted with federal responsibilities for wildlife, a renewable resource of ever-increasing importance to the national welfare and economy.

Each province has control over the natural resources within its boundaries, including wildlife. However, because Canada signed the Migratory Birds Treaty with the United States in 1916, there is a federal responsibility for the management and protection of migratory birds. The Canadian Wildlife Service administers the Migratory Birds Convention Act and Regulations for the federal government. In practice, federal and provincial governments co-operate in all matters concerning migratory birds. The Canadian Wildlife Service studies migratory birds throughout Canada and conducts scientific research into other wildlife problems in the Northwest Territories, the Yukon Territory, and Canada's National Parks; it also co-operates with administrative agencies when wildlife management programs indicated by research are instituted.

The Wildlife Service staff includes mammalogists, ornithologists, limnologists, pathologists, a pesticide investigator, and a biometristian. The head office is in Ottawa and there are regional offices in Edmonton and Ottawa. Smaller offices are located at Fort Smith and Inuvik, Northwest Territories; Whitehorse, Yukon Territory; Vancouver, British Columbia; Calgary, Alberta; Saskatoon, Saskatchewan; Winnipeg, Manitoba; Aurora, Ontario; Ste-Foy, Quebec; Fredericton and Sackville, New Brunswick; Halifax, Nova Scotia; and St. John's, Newfoundland.

The Service administers 94 migratory bird sanctuaries throughout Canada. It is now participating with the provinces in a major program of preserving, by purchase and long-

a growl of anger, a whining call, and sniffs of many sorts. A female with cubs may warn them of danger with a loud "woof-woof" and call them in with a whining or whimpering sound. A young cub in trouble emits a sound that is similar to the crying of a human baby.

Life history

Black bears are essentially solitary animals except for the close bond that exists between females and cubs, and the pairing which takes place during the mating season. Mating takes place in June or July, and the cubs are born the following January or February while the mother is still in her winter den. Generally, two cubs are born, although there may be only one or as many as four. At birth they are about six to eight inches long and weigh slightly more than half a pound. This is only about one two-hundredths of the mother's weight and is relatively much less than the weight of any other placental mammal at birth. They grow rapidly and are quite active by the time they leave the den with their mother in the spring. At one year they weigh from 40 to 75 pounds and at two years over twice this. Although young bears normally remain with their mother at least one year and sometimes longer, they are capable of fending for themselves when six months old.

Both males and females attain sexual maturity between their third and fourth years. Although male bears continue to grow until their seventh year of life, maximum growth in the female is attained somewhat earlier. Bears may live for 25 or 30 years, but most animals in the wild would be less than 10 years old.

In the autumn when days become shorter and temperatures cooler, bears begin to search for a denning site. A suitable site may be under a tree stump, or an over-turned log, or in a hole in a hillside. Most dens are only large enough to accommodate a bear when it is curled up. Generally, females line their dens with grass, ferns, or leaves while males usually do not. Since females usually den earlier they are able to find more lining material than the males, who frequently wait until the first snowfall before entering a den.

In the northern parts of the continent, black bears den earlier and remain there for a longer period of time than bears in the south. In Alaska, bears remain in their dens

for about six months, commencing in late September or October. In the state of Pennsylvania, bears den for about four months and in the valleys of the state of Washington only about two to three months. In Mexico, bears at the lower elevation may not den at all but remain active throughout the winter.

A denning bear is not truly hibernating, since its body temperature remains almost normal and its rate of metabolism is only slightly reduced. This period of dormancy may be described as a deep sleep since most bears can be aroused if prodded sufficiently. If the weather becomes exceptionally warm some bears may wake up and wander around for short periods during the winter months.

With the coming of spring and warmer weather, bears emerge from their dens and search for food. Their disposition at this time may be rather unfriendly since they are thin and hungry after their long period of inactivity.

Travel and feeding habits

Black bears are capable of travelling great distances — game wardens who have live-trapped bears and removed them 50 miles or more from their home ranges have sometimes been surprised by the bears' return. However, their home ranges are usually quite restricted. During the summer they wander over an area of about six square miles. In spring and autumn their range extends to approximately 15 square miles. Like most animals, they have customary routes of travel which they regularly follow as they move from one area to another. Old-time bear hunters took advantage of this and frequently set their traps along these well-used trails.

The major activity period of black bears is from dusk to dawn. Occasionally they will be seen during daylight hours, especially in the autumn when they eat extensively to build up a good supply of fat to tide them over the period of winter inactivity. Recent live-trapping and tagging studies have shown that bears move greater distances during the autumn than during the summer months.

Black bears are omnivorous and will eat almost anything available. Vegetation forms a large part of their diet, especially in the late summer and autumn when berries and nuts are available. Favourite fruits include blueberries, strawberries, juneberries, elder-

term lease, wetlands necessary to migratory birds for breeding and for resting during migration.

A National Wildlife Policy and Program was announced on April 6, 1966, that provides for expanded research and management in co-operation with the provincial game agencies and other interested organizations.

For further information on wildlife in your province please contact your chief provincial game officer.

Additional notes

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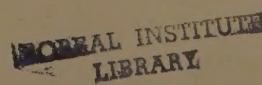
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